CBC51 — ENZYMES AND INTERMEDIARY METABOLISM

Time : Three hours   Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What is the importance of Lineweaver-Burk equation?

2. Define active site.

3. Why mitochondria are called the powerhouse of cell?

4. What is main function of PDH complex?

5. Define PUFA.

6. What are ketone bodies? Give example.

7. What is transamination give an example?

8. Write the significance of urea cycle.

9. What is uric acid? How is it formed?

10. Why is nucleotide metabolism important?

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Identify the salient features of the induced fit theory.

Or

(b) Examine the factors affecting enzyme activity.

12. (a) Illustrate the importance of PDH complex. Give example.

Or

(b) What are incaplers?

13. (a) Identify the steps involved in ketogenesis.

Or

(b) Describe the biosynthesis of triacyl glycerol.

14. (a) Write a note on the role of SGPT, SGOT.

Or

(b) Analyze the importance of glutamate dehydrogenase in amino acid metabolism.

15. (a) Explain the regulation of purine metabolism.

Or

(b) Discuss the degradation of pyrimidine pathway.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Classify enzymes with example.

17. Describe the process of glycogenesis.

18. Discuss about the biosynthesis of phospholipids.

19. Explain the biosynthesis of creatinine.

20. Elaborate on the denovo Synthesis of purine.